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09/726,394	12/01/2000	James F. Loughrey	4502-001	1287

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EXAMINER

LEE, WILSON

ART UNIT PAPER NUMBER

2821

DATE MAILED: 12/07/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/726,394

Applicant(s)
James Loughrey

Examiner
Wilson Lee

Art Unit
2821

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Dec 1, 2000

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-24 is/are pending in the application

4a) Of the above, claim(s) none is/are withdrawn from consideration

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-24 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

20) ☐ Other: _____

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Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 13, "single connectable replacement" is not very clear. Does it mean that the fixture has a single connection for an existing light source? Or the light source can be only replaced once?

Claim 14 is indefinite by virtue of its dependency on claim 13.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

4. Claims 1-11, 15-19, 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sinha et al. (6,188,181).

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Regarding Claims 1 and 15, Sinha discloses a light fixture comprising a plurality of light loads(L1... LN), and a light control(CP) connected to the plurality of light loads (L1..LN), wherein the light control(CP) is adapted to receive power from a single power source and is arranged to individually control each one of the plurality of light loads(L1...LN) by controlling the power provided to each of the individual light loads(L1..LN), and modify the light level through the dimmer (See Figures 1B and 1C).

Sinha's light fixture inherently comprises a plurality of light sockets within the loads because all lamp fixtures, including Sinha, must include sockets to provide power connections to the lamp tubes. No light fixture nowadays exclude sockets between the light emitting means(e.g. light tubes) and the circuit means(e.g. power connection, control circuit, switches etc.).

Regarding Claim 2, Sinha discloses a plurality of light sources(LS1.. LSN) mounted in the loads(L1.. LN), wherein the light sources comprise incandescent lamp(See Col. 4, lines 45-48).

Regarding Claims 3 and 16, Sinha discloses the light control comprising a computer(e.g. CP) (See Figure 1C).

Regarding Claims 4 and 17, Sinha discloses the light control comprising a processor(20) (See Figure 1C).

Regarding Claims 5 and 18, Sinha discloses that the light control is networkable(See Figure 1C).

Regarding Claims 6 and 19, Sinha discloses that the loads inherently comprise two or more light source sockets(See Figure 1C).

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Regarding Claims 8 and 21, Sinha discloses that the light control is adapted to control the single feed power provided to each one of the plurality of light source sockets within the loads by turning on and off individually (through the internal relays such as Relay 1... Relay N) each one of the plurality of light source sockets within the loads (See Figure 1B and 1C).

Regarding Claim 9, Sinha discloses that the light control (CP1) is adapted to send and receive signals to the relay and from the main unit respectively (See Figure 1B).

Regarding Claim 10, Sinha discloses that the sent and received signals comprise control signals (See Figure 1C).

Regarding Claim 11, Sinha discloses that the received signals comprise command to control the light control (CP) through MUX (See Figure 1C).

Regarding Claim 22, Sinha discloses that the received signal is received from a network (U1, U2, U3) (See Figure 1C).

Regarding Claims 23 and 24, Sinha discloses the step of sending a signal indicative of the status of the light fixture and the light source sockets and indicating on the displays (See Figure 1E).

5. Claims 1-6, 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Recknagel et al. (6,031,343).

Regarding Claim 1, Recknagel discloses a light module comprising a plurality of light loads ($140_{n,1} \dots 140_{n,m}$), and a light control ($120_1 \dots 120_n$) connected to the plurality of light loads ($140_{n,1} \dots 140_{n,m}$), wherein the light control ($120_1 \dots 120_n$) is adapted to receive power from a single

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power source and is arranged to individually control each one of the plurality of light loads ($140_{n,1} \dots 140_{n,m}$) by controlling the power provided to each of the individual light loads ($140_{n,1} \dots 140_{n,m}$), and modify the light level through the dimmer (See Figures 1B and 1C).

Recknagel's light module inherently comprises a plurality of light sockets within the loads because all lamp fixtures, including Recknagel, must include sockets to provide power connections to the light emitting elements.

Regarding Claim 2, Recknagel discloses a plurality of light sources ($140_{n,1} \dots 140_{n,m}$) mounted in the loads ($L1.. LN$), wherein the light sources comprise LEDs (32, 34, 36) (See Figure 7).

Regarding Claim 3, Recknagel discloses the light control comprising a computer (e.g. PC) (See Figure 9 and Col. 7, lines 51-57).

Regarding Claim 4, Recknagel discloses the light control comprising a processor (200) (See Figure 9 and Col. 7, line 55).

Regarding Claim 5, Recknagel discloses that the light control is networkable (See Figure 1).

Regarding Claim 6, Recknagel discloses that the loads inherently comprise two or more light source sockets (See Figure 1). Explanation provided above.

Regarding Claim 8, Recknagel discloses that the light control is adapted to control the single feed power provided to each one of the plurality of light source sockets within the loads by

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turning on and off individually (through the transistor switches 152, 154, 156, etc.) each one of the plurality of light source sockets of the LEDs (See Figures 1 and 7).

Regarding Claim 9, Recknagel discloses that the light control (120) is adapted to send and receive signals to another control (120n) and from the central controller (110) respectively (See Figure 1).

Regarding Claim 10, Recknagel discloses that the sent and received signals comprise control signals (See Figure 1).

Regarding Claim 11, Recknagel discloses that the received signals comprise command to control the light control (120₁...120_n) through interface (115) (See Figure 1).

Regarding Claim 12, Recknagel discloses that the sent signals comprise commands to another control (120n) (See Figure 1).

6. Claims 13 and 14, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Sinha et al. (6,188,181).

Regarding Claim 13, Sinha discloses that the light fixture has single connection for an existing light source (e.g. incandescent lamp bulb).

Regarding Claim 14, Sinha discloses that the light fixture comprises a single screw in replacement element for incandescent lamp bulb.

7. Claims 13 and 14, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Recknagel et al. (6,031,343)

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Regarding Claim 13, Recknagel discloses that the light fixture has single connection for an existing light source(e.g. light emitting diode).

Regarding Claim 14, Recknagel discloses that the light fixture comprises a single screw in replacement element for the light emitting diode.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinha et al. (6,188,181).

Regarding Claims 7 and 20, as discussed above, Sinha essentially discloses the claimed invention but fails to disclose that there are 256 light source sockets or loads. However, since Sinha does not limit the number of sockets or loads, the implementation of such number(e.g. 256) of light source is not restricted. It would have been obvious to one of ordinary skill in the art to use 256 sockets or loads in Sinha in order to render illumination in a desired size area.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Recknagel et al. (6,031,343).

Regarding Claim 7, as discussed above, Recknagel essentially discloses the claimed invention but fails to disclose that there are 256 light source sockets or loads. However, since

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Recknagel does not limit the number of sockets or loads, the implementation of such number(e.g. 256) of light source is not restricted. It would have been obvious to one of ordinary skill in the art to use 256 sockets or loads in Recknagel in order to render illumination in a desired size area.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bonasia et al. (6,307,331) discloses a network light control comprising a plurality of sensors. Chou (5,945,789) discloses a two-wire display lighting control structure comprising a plurality of different loads. Yamazaki et al. (4,388,567) discloses a main control device comprising a plurality of lighting control signal generators.

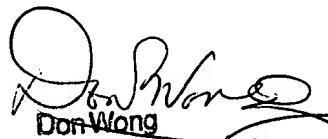
Correspondence

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (703) 306-3426.

13. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

14. Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

WL
11/29/01


Don Wong
Supervisory Patent Examiner
Technology Center 2800